Biosensor Measurement Datasheet
Second Bangor Demonstration, September 2004

40 mL Vial Number: MOW-1-1 (B)	**Analyst:** NICOLA ACHA	**Checked By:**
Biosensor ID: 422	**Date:** 09/20/04	**Date Checked:**
pH Optode ID: 105	**Time:**	
pH Optode Sensitivity: 32 **PMT:** 600V		

Subsample Number (4.85 mL Vial)	Biosensor or Optode Reading?	Step Number	Step Description	Solution Removed and Volume (uL)	Solution Added and Volume (uL)	Start Time	Start Volts	End Time	End Volts	Delta T	Delta V
	BIO	1	MOW-1-1	100	100	8:23	6.66	8:30	6.355	7	0.306
	BIO	2	dca (100ppb)	50	50	8:33	6.363	8:42	6.115	9	0.248
	BIO	3	dca (100ppb)	25	25	8:49	5.97	8:07	5.369	18	0.601
	BIO	4	dca (100ppb	75	75	9:16	4.305	9:34	3.258	18	1.047
	BIO	5	HCl (1mM)	50	50	9:36	3.31	9:40	3.02	4	0.29
	BIO	6	HCl (1mM)	25	25	9:43	3.01	9:47	2.77	4	0.24
	BIO	7	HCl (1mM)	75	75	9:50	2.75	9:58	2.37	8	0.378
	pHopt	8	MOW-1-1	100	100	10:01	9.732	10:04	9.37	3	0.362
	pHopt	9	DCA (100ppb)	50	50	10:05	9.37	10:12	8.62	5	0.75
	pHopt	10	DCA (100ppb)	25	25	10:14	8.64	10:20	8.06	6	0.58
	pHopt	11	DCA (100ppb)	75	75	10:21	8.00	10:28	6.98	6	1.02
	pHopt	12	HCl (1mM)	50	50	10:30	7.54	10:37	7.38	7	0.16
	pHopt	13	HCl (1mM)	25	25	10:38	7.37	10:49	6.86	11	0.51
	pHopt	14	HCl (1mM)	75	75	10:50	6.86	10:57	6.18	7	0.68

Comments:

Uncorrected DCA Concentration of Unknown (ug/L) =

Corrected DCA Concentration of Unknown (ug/L) =

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Biosensor Measurement Datasheet
Second Bangor Demonstration, September 2004

40 mL Vial Number: mow-1-1	Analyst: Doctor ACHA	Checked By:
Biosensor ID: 422	Date: 09/20/04	Date Checked:
pH Optode ID: 105	Time: 2:11 PM	
pH Optode Sensitivity: 32 PMT: 600		

Subsample Number (4.85 mL Vial)	Biosensor or Optode Reading?	Step Number	Step Description	Solution Removed and Volume (uL)	Solution Added and Volume (uL)	Start Time	Start Volts	End Time	End Volts	Delta T	Delta V
	Bio	1	mow-1-1	100	100	2:11	8.232	2:15	8.159	4	0.073
	Bio	2	DCA (100 ppb)	50	50	2:21	8.351	2:24	8.278	3	0.073
	Bio	3	DCA (100 ppb)	25	25	2:31	8.393	2:35	8.243	4	0.150
	Bio	4	DCA (100 ppb)	75	75	2:45	8.393	2:49	8.244	4	0.149
	Bio	5	HCl (1mM)	50	50	3:50	9.576	3:53	9.507	3	0.069
	Bio	6	HCl (1mM)	25	25	4:01	9.436	4:03	9.391	2	0.045
	Bio	7	HCl (1mM)	75	75	4:08	9.482	4:11	9.383	3	0.1
	pHop	8	mow-1-1	100	100	4:41	11.313	4:44	11.261	3	0.052
	pHop	9	DCA (100 ppb)	50	50	4:45	11.26	4:47	11.078	2	0.182
	pHop	10	DCA (100 ppb)	25	25	4:50	11.057	4:52	10.909	2	0.149
	pHop	11	DCA (100 ppb)	75	75	4:59	10.47	5:06	9.863	7	0.615
	pHop	12	HCl (1mM)	50	50	5:15	10.884	5:17	10.829	2	0.055
	pHop	13	HCl (1mM)	25	25	5:19	10.808	5:20	10.779	1	0.029
	pHop	14	HCl (1mM)	75	75	5:22	10.714	5:25	10.635	3	0.105

Comments:

Uncorrected DCA Concentration of Unknown (ug/L) =

Corrected DCA Concentration of Unknown (ug/L) =

Biosensor Measurement Datasheet
Second Bangor Demonstration, September 2004

40 mL Vial Number: mow-2-1	**Analyst:** VICTOR ACHA	**Checked By:**	
Biosensor ID: 422	**Date:** 9/20/04	**Date Checked:**	
pH Optode ID: 105	**Time:** 11:13 PM		
pH Optode Sensitivity: 32 **PMT:** 600 V			

Subsample Number (4.85 mL Vial)	Biosensor or Optode Reading?	Step Number	Step Description	Solution Removed and Volume (uL)	Solution Added and Volume (uL)	PM Start Time	Start Volts	End Time	End Volts	min Delta T	Delta V
	BIO	1	mow-2-1	100	100	11:13	10.456	11:26	10.173	13	0.283 (0.283)
	BIO	2	DCA (100ppb)	50	50	11:26	10.173	11:34	10.01	8	0.163
	BIO	3	DCA (100ppb)	25	25	11:36	10.004	11:43	9.82	7	0.184
	BIO	4	DCA (100ppb)	75	75	11:45	9.782	11:59	9.39	14	0.392
	BIO	5	HCl (1mM)	50	50 9/21/04 AM	00:21	8.554	00:26	8.31	5	0.243
	BIO	6	HCl (1mM)	25	25 AM	00:28	8.205	00:32	7.965	4	0.24 (0.24)
	BIO	7	HCl (1mM)	75	75 AM	00:35	7.97	00:42	7.586	7	0.384
	pHopt	8	mow-2-1	100	100	00:54	8.632	00:56	8.38	2	0.252
	pHopt	9	DCA (100ppb)	50	50	00:57	8.386	01:07	7.593	4	0.793
	pHopt	10	DCA (100ppb)	25	25	01:03	7.5185	1:10	6.947	7	0.5715
	pHopt	11	DCA (100ppb)	75	75	1:11	6.923	1:18	5.84	7	1.083
	pHopt	12	HCl (1mM)	50	50	1:29	7.919	1:35	7.76	6	0.159
	pHopt	13	HCl (1mM)	25	25	1:37	7.746	1:49	7.314	12	0.432
	pHopt	14	HCl (1mM)	75	75	1:50	7.322	1:58	6.616	8	0.706

Comments:

Uncorrected DCA Concentration of Unknown (ug/L) =

Corrected DCA Concentration of Unknown (ug/L) =

Biosensor Measurement Datasheet
Second Bangor Demonstration, September 2004

40 mL Vial Number: MOW-3-2 16H30 9/24/04	Analyst: Victor Acha	Checked By:
Biosensor ID: 422	Date: 9/21/04	Date Checked:
pH Optode ID: 105	Time:	
pH Optode Sensitivity: 32 PMT: 600V		

Subsample Number (4.85 mL Vial)	Biosensor or Optode Reading?	Step Number	Step Description	Solution Removed and Volume (uL)	Solution Added and Volume (uL)	Start Time	Start Volts	End Time	End Volts	Delta T	Delta V	
	Bio	1	MOW-3-2	100	100	8:32	11.255	8:33	11.224	1	0.031	
	Bio	2	DCA (100ppb)	50	50	8:38	11.2365	8:41	11.21	3	0.0265	
	Bio	3	DCA (100ppb)	25	25	8:45	11.2465	8:47	11.202	2	0.0445	
	Bio	4	DCA (100ppb)	75	75	8:49	11.2015	8:53	11.1225	4	0.079	✓
	Bio	5	HCl (1mM)	50	50	9:08	10.97	9:09	10.932	1	0.038	0.025
	Bio	6	HCl (1mM)	25	25	9:09	10.947	9:11	10.9115	2	0.0335	0.013
	Bio	7	HCl (1mM)	75	75	9:21	10.96	9:24	10.924	3	0.036	0.051
	pHopt	8	MOW-3-2	100	100	9:47	11.383	9:52	10.788	5	0.595	(0.595
	pHopt	9	DCA (100ppb)	50	50	9:57	10.784	10:01	10.554	4	0.23	
	pHopt	10	DCA (100ppb)	25	25	10:03	10.37	10.13	10.37	10	0.2	
	pHopt	11	DCA (100ppb)	75	75	10:14	10.35	10:18	10.022	4	0.328	
	pHopt	12	HCl (1mM)	50	50	11:49	11.234	12.01	11.125	12	0.109	
			HCl (1mM)	25	25	12:01	11.124	12:05	11.08	4	0.044	
			HCl (1mM)	75	75	12:08	11.04	12:14	10.965	6	0.1405	

Comments:

75uL HCl additions
1) - 0.01
2) - 0.02

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